

What Is Claimed Is:

1. An assembly, comprising:
an outer race of a constant velocity joint;
and
a shaft of an outboard drive axle axially
5 coupled to said outer race, wherein said shaft has an
external surface and an external groove
circumferentially formed in the external surface of
said shaft.
- 10 2. The assembly of claim 1, further
comprising a retaining element engaged in the external
groove of said shaft.
- 15 3. The assembly of claim 1, further
comprising a retaining element retractable within the
external groove of said shaft.
- 20 4. The assembly according to claims 1,
wherein the external surface of said shaft has a
plurality of splines.
- 25 5. The assembly according to claim 2 or
claim 3, wherein the retaining element is a spring
ring.
6. The assembly of claim 2, further
comprising a wheel hub having a first bore and a
radially extending flange, wherein the first bore of

5 said wheel hub is coupled to the external surface of said shaft and held in an assembled position between said outer race and said retaining element, wherein said retaining element is engaged in the external groove of said shaft.

7. The assembly of claim 2, further comprising part of a wheel bearing and a wheel hub, wherein said wheel bearing part comprises a second bore, a first side and a second side, where said wheel bearing part is coupled to said shaft and the first side is adjacent to said outer race, and wherein said wheel hub comprises a first inner bore and a radially extending flange, wherein the first bore of said wheel hub is coupled to the external surface of said shaft and is held in an assembled position between the second side of said bearing part and said retaining element, and wherein said retaining element is engaged in the external groove of said shaft.

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8. The assembly of claim 3, further comprising a wheel hub having a first bore, a radially extending flange, and an internal groove circumferentially formed in the first bore for receiving said retaining element, wherein the first inner bore of said wheel hub is coupled to the external surface of said shaft, wherein said wheel hub and said shaft are held in an assembled position by said retaining element, and wherein said retaining element

is engaged in said internal groove and said external groove.

9. The assembly of claim 3, further comprising part of a wheel bearing and a wheel hub, wherein said wheel bearing part comprises a second bore, a first side and a second side, wherein said wheel bearing part is coupled to said shaft and the first side is adjacent to said outer race, and wherein said wheel hub comprises a first bore, a radially extending flange, and an internal groove circumferentially formed in the first bore for receiving said retaining element, wherein the first bore of said wheel hub is coupled to the external surface of said shaft and adjacent to the second side of said wheel bearing part, wherein said wheel hub and said shaft are held in an assembled position by said retaining element, and wherein said retaining element is engaged in said internal groove and said external groove.

10. The assembly according to any one of claim 6, wherein the first bore of said wheel hub and the external surface of said shaft has inter-engaging splines.

11. The assembly according to any one of claim 7, wherein the first bore of said wheel hub and the external surface of said shaft has inter-engaging splines.

12. The assembly according to any one of
claim 8, wherein the first bore of said wheel hub and
the external surface of said shaft has inter-engaging
5 splines.

13. The assembly according to any one of
claim 9, wherein the first bore of said wheel hub and
the external surface of said shaft has inter-engaging
10 splines.

14. An assembly, comprising:
an outer race of a constant velocity joint;
a shaft of an outboard drive axle axially
15 coupled to said outer race, wherein said shaft has an
external surface and an external groove
circumferentially formed in the external surface of
said shaft;
a steering knuckle having a third bore and a
20 backstop;
a retaining ring;
a new generation wheel bearing assembly
comprising an outer part rotatably coupled by a
plurality of bearing elements to an inner part, wherein
25 the inner part has a second bore, a first side and a
second side, wherein the outer part of said wheel
bearing assembly is fit into the third bore up to the
backstop of said steering knuckle and retained by said
retaining ring opposite the backstop, the inner part of

the wheel bearing assembly is coupled to said shaft and the first side is adjacent to said outer race;

a retaining element; and

5 a wheel hub having a first bore and a radially extending flange, wherein the first bore of said wheel hub is coupled to the external surface of said shaft and held in an assembled position between the second side of the inner part of said wheel bearing assembly and said retaining element, wherein said 10 retaining element is engaged in the external groove of said shaft, and wherein the wheel hub is rotatably drivable within the steering knuckle by the constant velocity joint.

15 15. The assembly of claim 14, further comprising an internal groove in the first bore of said wheel hub, wherein said retaining element is engaged in said internal groove and said external groove.

20 16. The assembly according to claim 14, wherein the first bore of said wheel hub and the external surface of said shaft has inter-engaging splines.

25 17. In an assembly comprising an outer race of a constant velocity joint, a shaft of an outboard drive axle axially coupled to said outer race, wherein said shaft has an external surface and an external groove circumferentially formed in the external surface 30 of said shaft, and a new generation wheel bearing

assembly having a second bore, a retaining element, and a wheel hub having a first bore and a radially extending flange, a method of retaining said wheel hub and said wheel bearing in telescopic relationship with 5 said shaft by said retaining element comprising:

telescoping said shaft inwardly through the second bore of said wheel bearing assembly and the first bore of said wheel hub;

10 retaining said wheel hub and said wheel bearing assembly on said shaft with an engaged retaining element in the external groove of said shaft; and

mounting said retaining element on said shaft.

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18. The method of claim 17, further comprising compressing said retaining element within said external groove of said shaft while receiving in telescopic relationship said wheel hub onto said shaft.

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19. The method of claim 18, further comprising an internal groove circumferentially located in the second bore of said wheel hub for receiving said retaining element, wherein said retaining element is a 25 spring ring.